

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-004726**Date Inspected:** 07-Nov-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1430**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 600**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	N/A	CWI Present:	Yes	No
Inspected CWI report:	Yes No N/A	Rod Oven in Use:	Yes No N/A	
Electrode to specification:	Yes No N/A	Weld Procedures Followed:	Yes No N/A	
Qualified Welders:	Yes No N/A	Verified Joint Fit-up:	Yes No N/A	
Approved Drawings:	Yes No N/A	Approved WPS:	Yes No N/A	
		Delayed / Cancelled:	Yes No N/A	
Bridge No:	34-0006	Component:	plate steel, deck panels, PMT	

Summary of Items Observed:

Storage Yard

Caltrans Quality Assurance Inspector George Goulet (QA Inspector) met ABF QA Jeff Evans and received from Shift Supervisor Ken Riley a "List of Material for Caltrans Check Samples". The list had previously been noted on by QA Inspector and Caltrans Quality Assurance Inspector's Charles Franco and Robert Vatcher, however several items on the list had not yet been verified and recorded with notations. QA Inspector then met with ZPMC QC Cindy (ZPMC QC) and was led to the steel plate storage area where various plates noted on the list were observed. QA Inspector was shown by the ZPMC QC the unverified plates remaining on the list. A 355mm x460mm rectangle was drawn, by ZPMC personnel, at one corner of each plate representing each sample. QA Inspector verified the I.D. number on the plate with a corresponding number on the list and applied a matching Caltrans lot number to each. Also on the sample, an arrow was drawn by QA Inspector corresponding with an arrow on the plate signifying the direction of roll during manufacture. Thirteen samples were individually verified and marked in this manner with Caltrans lot numbers L26-207-08 consecutively through L26-219-08. All items on the list appeared to have been verified and assigned a Caltrans lot number.

Heavy Duty Machine Shop- Bay 3

Caltrans Quality Assurance Inspector George Goulet (QA Inspector) performed final MT verification, 10% of the total linear distance of the 10% final MT performed by ZPMC on deck panels DP166-001, DP382-001, and DP301-002. No apparent indications were observed. QA Inspector noted final MT had been performed on the yellow tag attached to each deck panel.

Sub-assembly – Bay 1 - PMT

WELDING INSPECTION REPORT

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Caltrans Quality Assurance Inspector George Goulet (QA Inspector) monitored OBG Production Monitoring Tests (PMT) #1 and #2 for deck panels DP475-001 and DP232-001 at Gantry #2. Prior to PMT #1, the magnetic particle test (MT) of the tack welds was noted on the test panel as having been performed by ZPMC QC/MT Inspector Xu Hai (ZPMC MT Inspector). The visual inspection of tack welds and root gap was performed by ABF QC Wang Zhen Hua (ABF), ZPMC CWI Chen Xi (CWI), and QA Inspector. The start time for welding of PMT #1 was approximately 0030 hours on Saturday, 11/8/08. However, the test was not completed. CWI reported to QA Inspector that welder #1 had run out of electrode before the test while the test was in progress. A new test panel was installed and after the previously welded tacks were ground, QA Inspector randomly observed ZPMC MT Inspector perform MT on the tack welds. ZPMC MT Inspector reported that he had observed no indications. The visual inspection of tack welds and root gap of the test panel for PMT #2 was performed by ABF, CWI, and QA Inspector. The start time for welding of PMT #2 was 0106 hours and completion time 0131 hours. QA inspector randomly verified and documented the welding amperage, voltage and travel speed during the gas metal arc welding (GMAW) and submerged arc welding (SAW) process, welds 1 thru 6 at the completion of the GMAW root pass and SAW cover pass. The welds were visually inspected by ABF, CWI and QA Inspector. QA inspector witnessed ZPMC UT inspector identified as Xue Hai Yong inspect the welds for depth of penetration and conformance. QA inspector identified designated locations for macroetch sampling per contract requirements. The macroetch specimens were evaluated with a 7X optical comparator and accepted by CWI, ABF, and QA Inspector. All fifteen sample macros appeared to meet requirements and were noted to appear acceptable. See Caltrans U-ribs PMT Inspection Sheet, ZPMC production monitoring test plate inspection report, and Caltrans Macro Etch Log - all dated 11/8/2008 for additional information.

Summary of Conversations:

As noted above in Summary.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Joshua Ishibashi, 136-6471-0411, who represents the Office of Structural Materials for your project.

Inspected By:	Goulet,George	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
